

BookletChart™

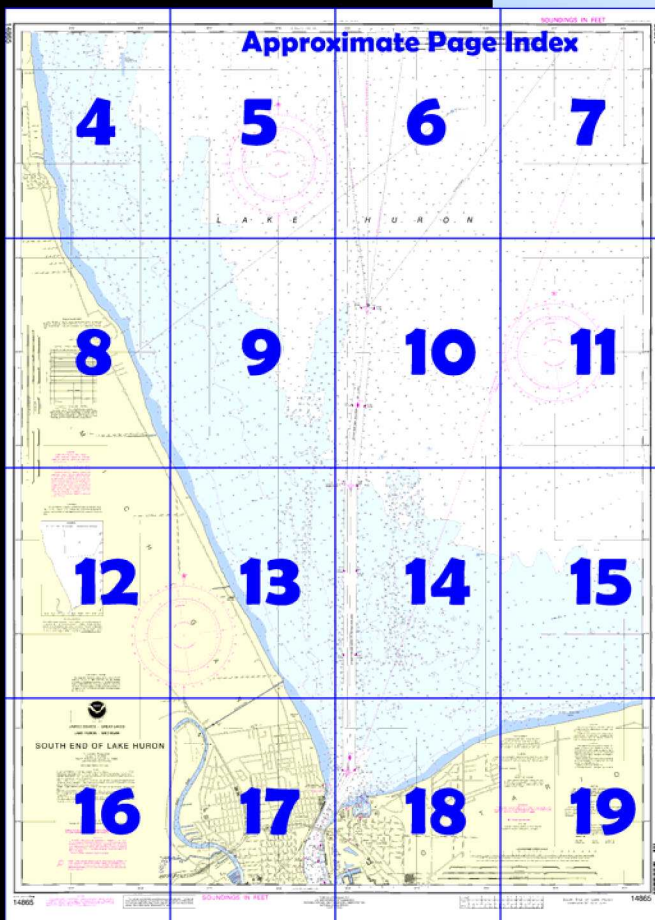
South End of Lake Huron

(NOAA Chart 14865)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



Guard Station. (See **33 CFR 165.1 through 165.13 and 165.920**, chapter 2, for limits and regulations.)
 (51) **Black River Canal**, entered about 1.4 miles NNW of Fort Gratiot Light, extends SW for about 1.1 miles to its junction with the Black River.

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

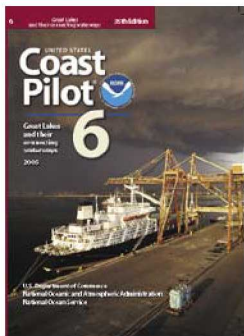
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 10 excerpts]

(48) The S end of Lake Huron in the approach to the head of the St. Clair River is obstructed by an extensive shoal area. A dredged channel, maintained at the Federal project depth of 30 feet, leads S for about 6 miles through the shoals to the head of the river. The channel is marked by lighted buoys and a **180.3°** lighted range at Point Edward, Ont. A racon is at the front light. Lake Huron Cut Lighted Buoy 12 marks the entrance to the channel from Lake Huron. Lake Huron Cut

Light 7, about 2.2 miles from the entrance, is equipped with a racon.
 (49) **Fort Gratiot Light** (43°00.4'N., 82°25.4'W.), 82 feet above the water, is shown from a white brick conical tower on the W side of the head of St. Clair River. Port Huron Coast Guard Station is close S of the light. A **regulated navigation area** has been established off the Coast

Table of Selected Chart Notes

Pump-out facilities

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service stations listed below provide continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Clio, MI	KIH-29	162.40 MHz
Detroit, MI	KEC-63	162.55 MHz

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION

Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light List and National Imagery and Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ◐ (Approximate location)

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected on average of 0.107" northward and 0.298" eastward to agree with this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency, the Canadian Department of Fisheries and Oceans, and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.



Vessel Traffic Service calling-in point; arrow indicates direction of vessel movement. Mandatory calling-in points are identified numerically. Voluntary calling-in points are identified alphabetically. For additional information see U.S. Coast Pilot 6 and the U.S. and Canadian Notice to Mariners.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910 - 3282.

AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1

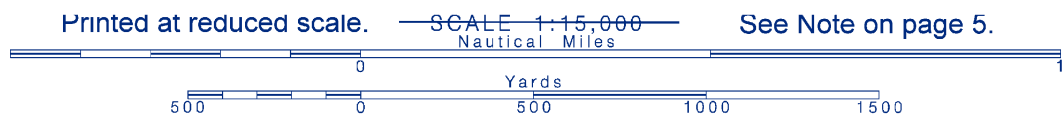
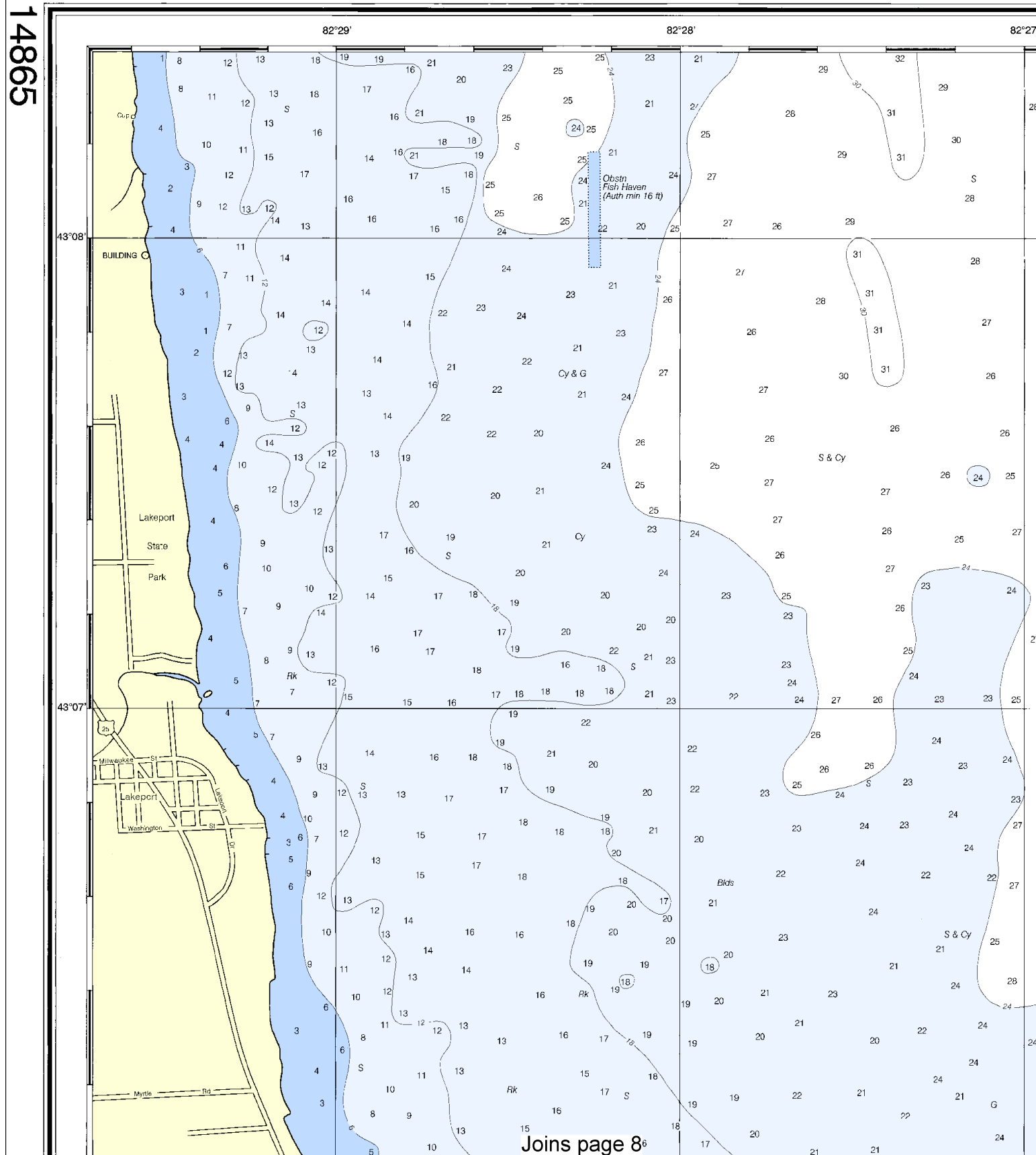
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

NOTES

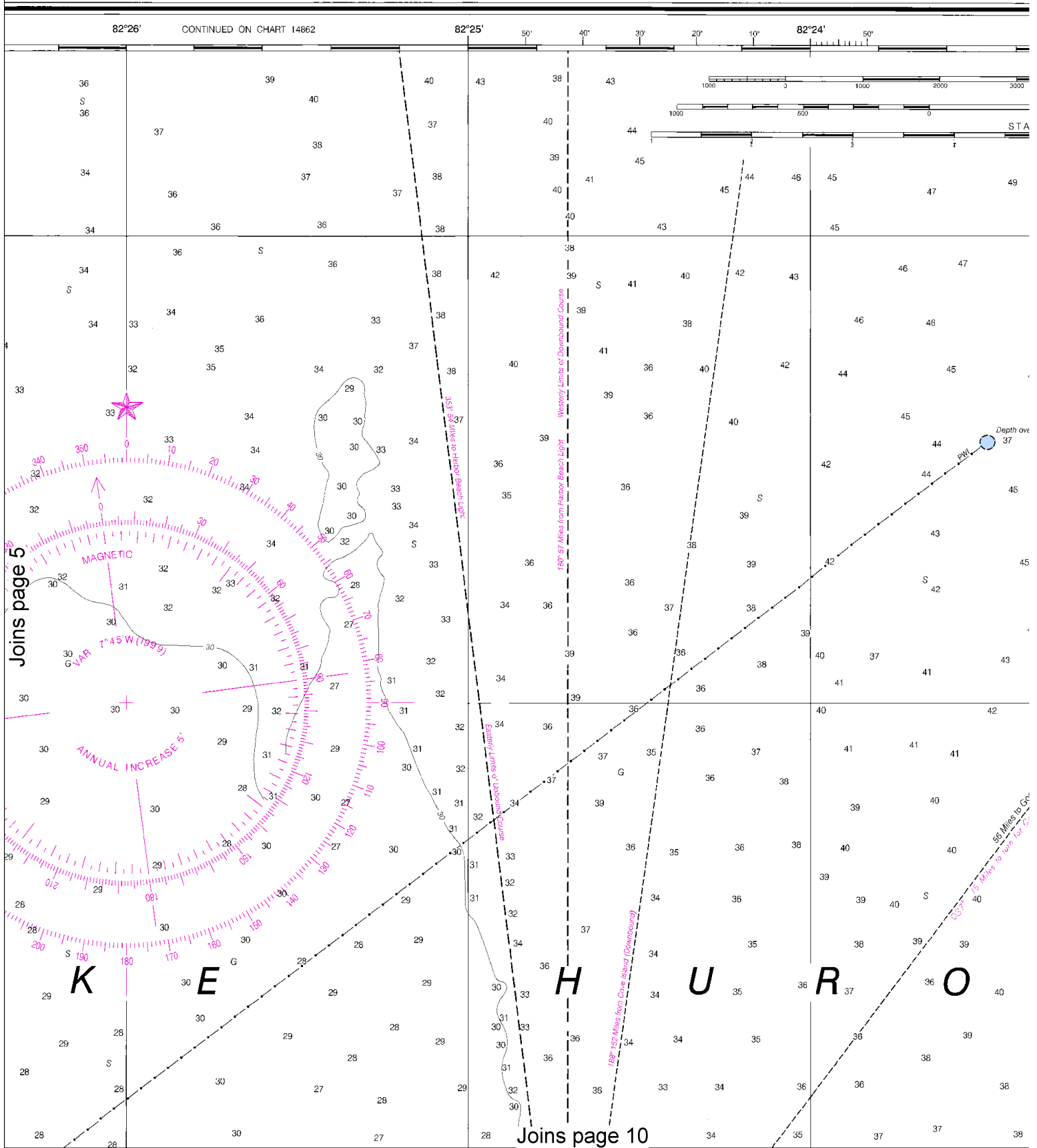
PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

14865



Printed at reduced scale.

See Note on page 5.



6



Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

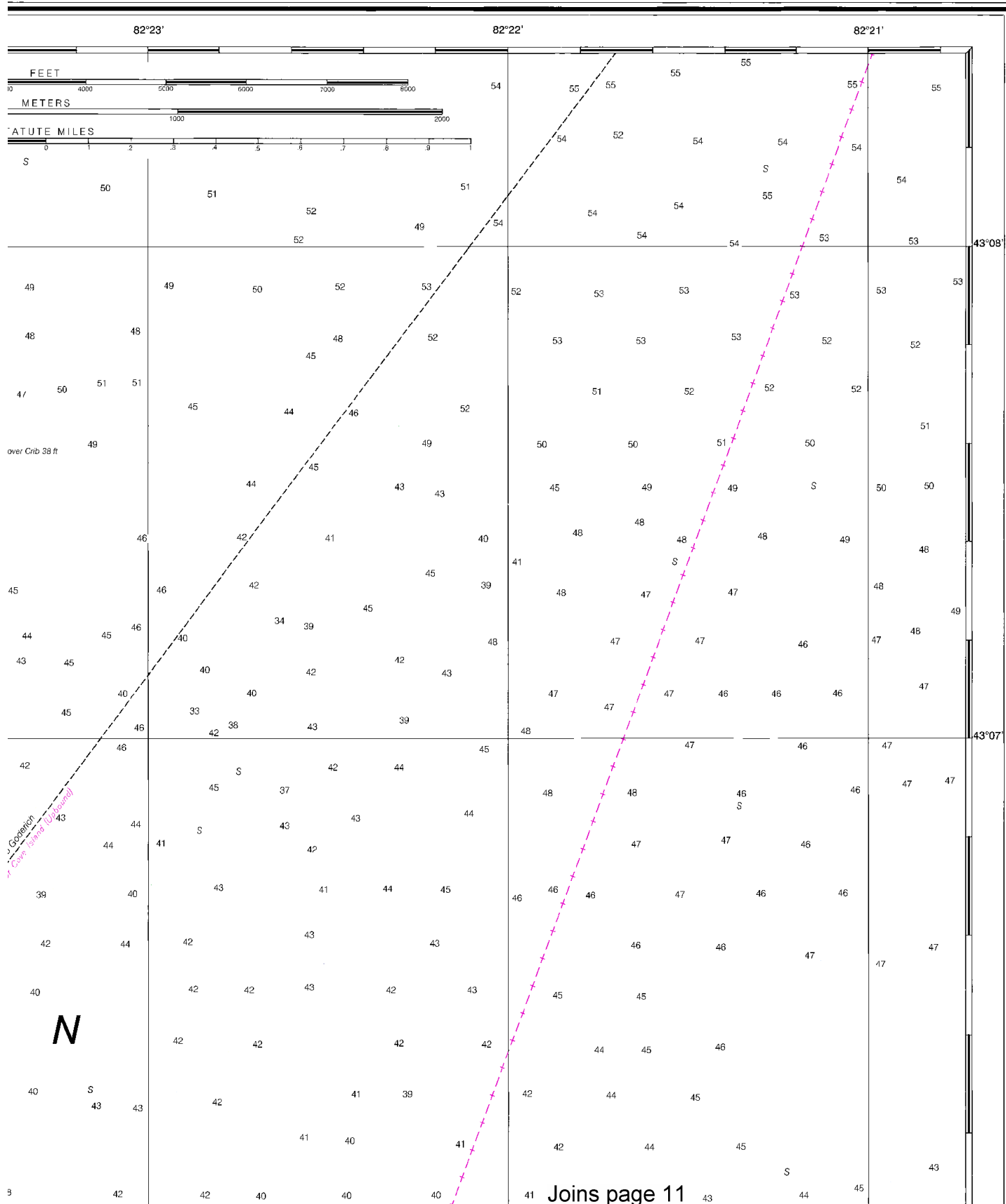
See Note on page 5.



SOUNDINGS IN FEET

Nautilus Chart Catalog No. 4, Panel C

14865



Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.

7

Joins page 4

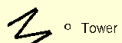
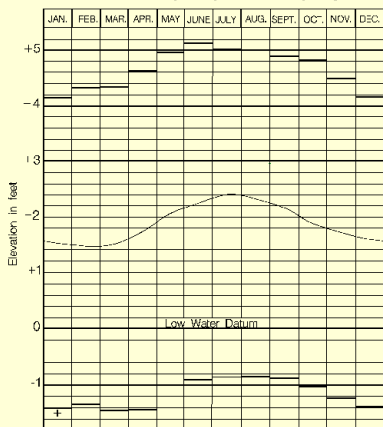
43°06'

43°05'

43°04'

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8902 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

LAKE MICHIGAN - HURON



CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and sub-

Joins page 12

8

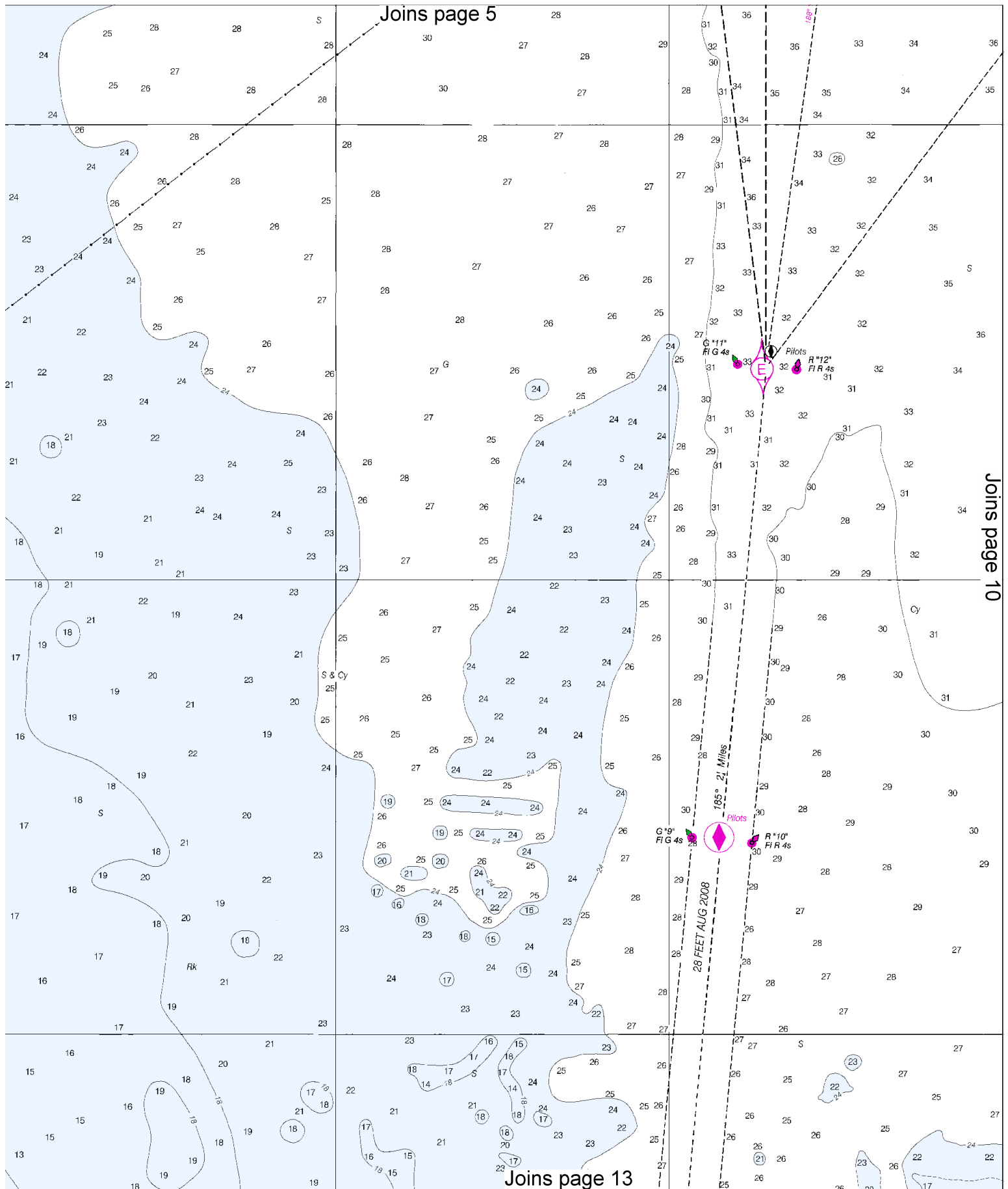
North

Printed at reduced scale.

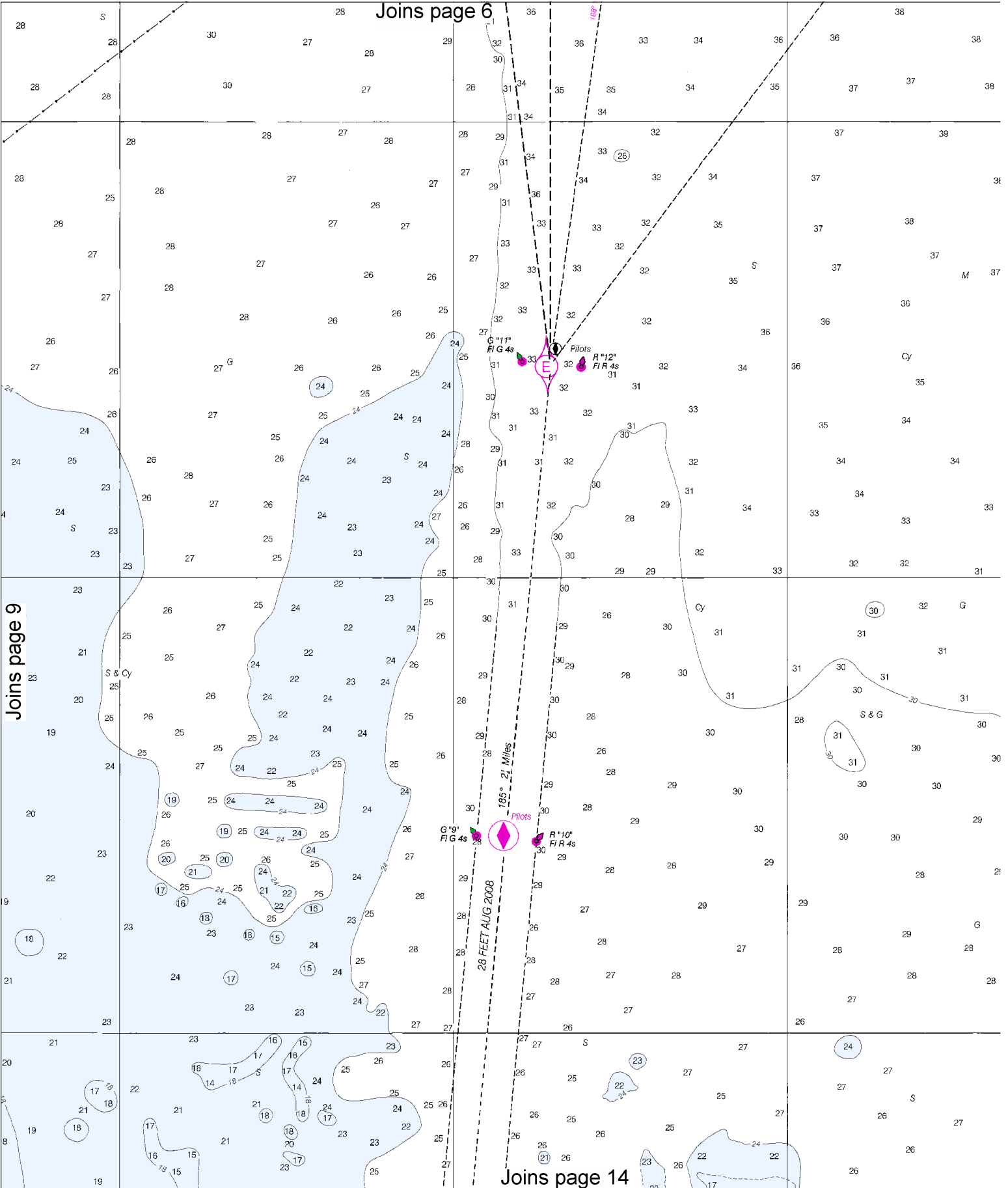
SCALE 1:15,000
Nautical Miles

See Note on page 5.





Joins page 6



10



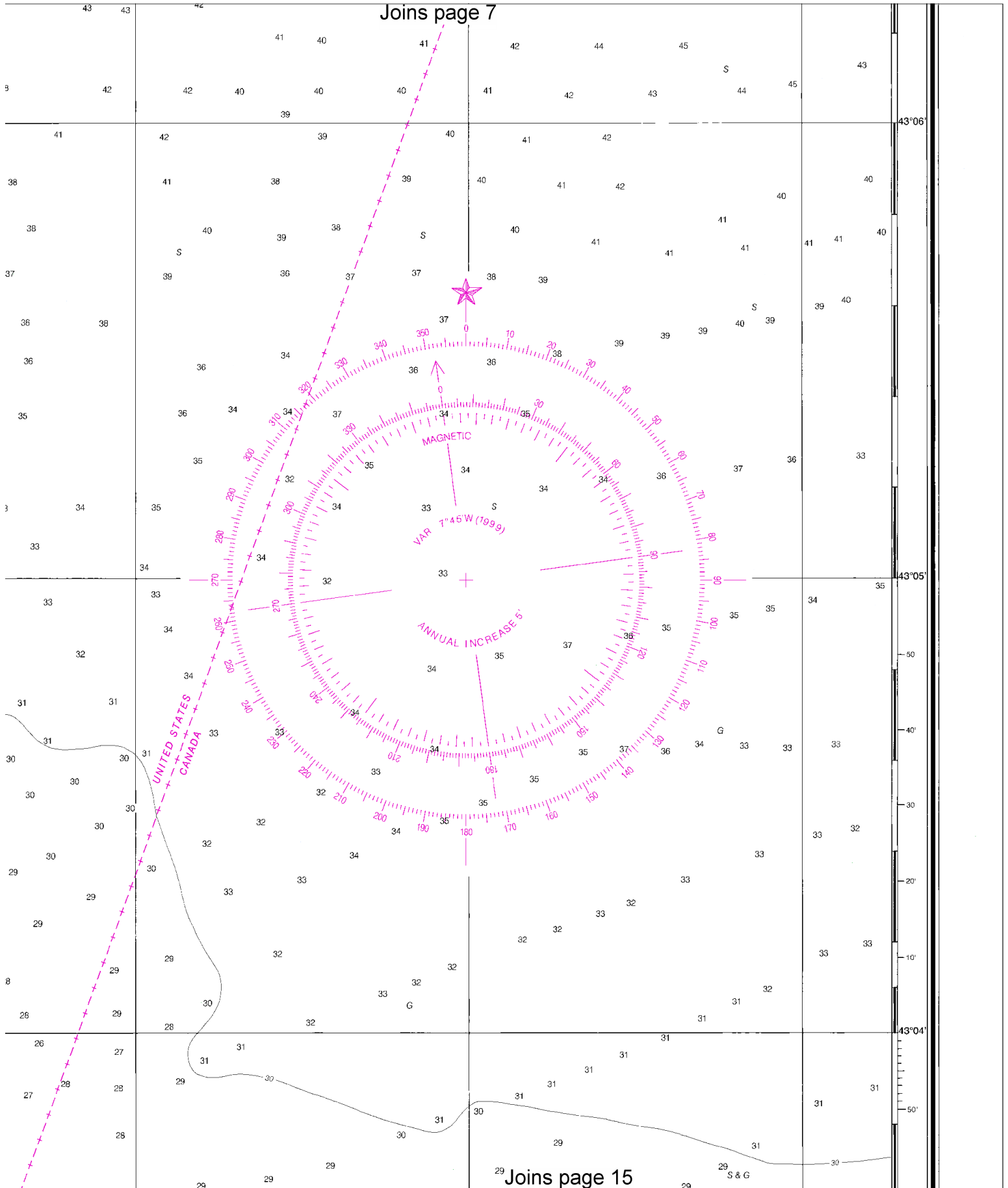
Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.



Joins page 7



Joins page 15

cables and submarine pipeline and ca

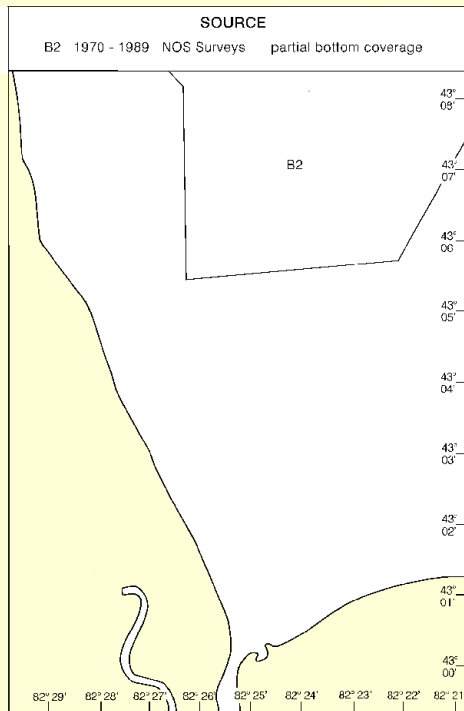
Additional uncharted submarine pipelines and submarine cables may exist in the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

SOURCE

B2 1970 - 1989 NOS Surveys partial bottom coverage



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.107" northward and 0.298" eastward to agree with this chart.

Joins page 16

Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.

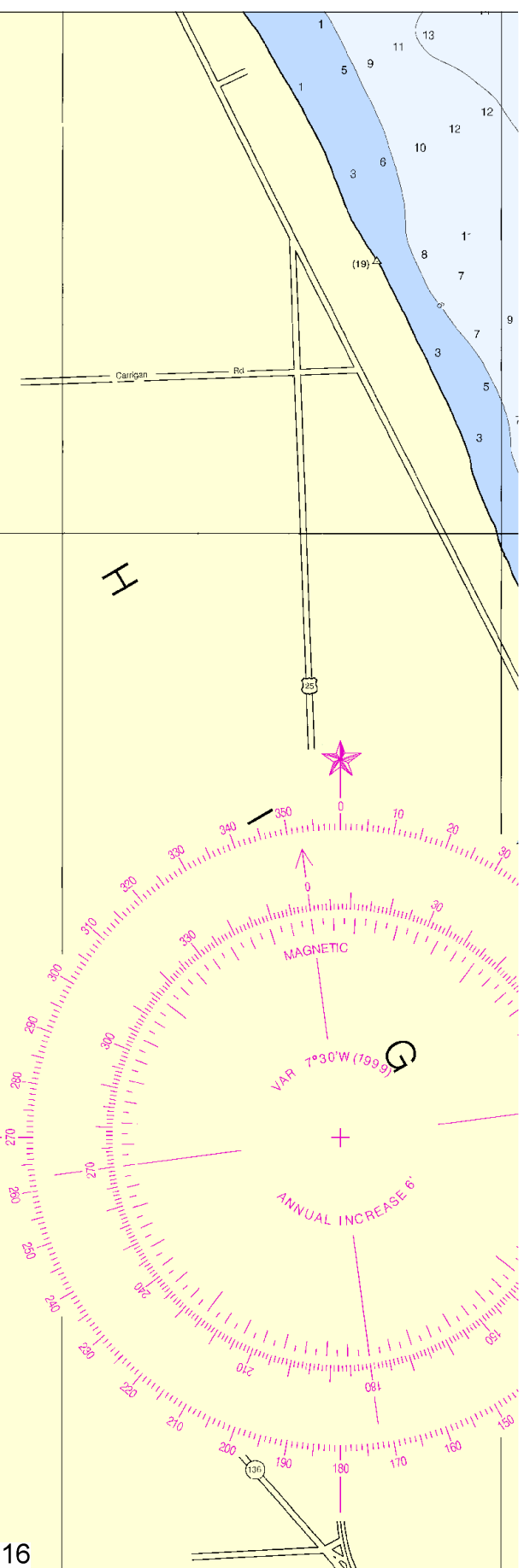
12

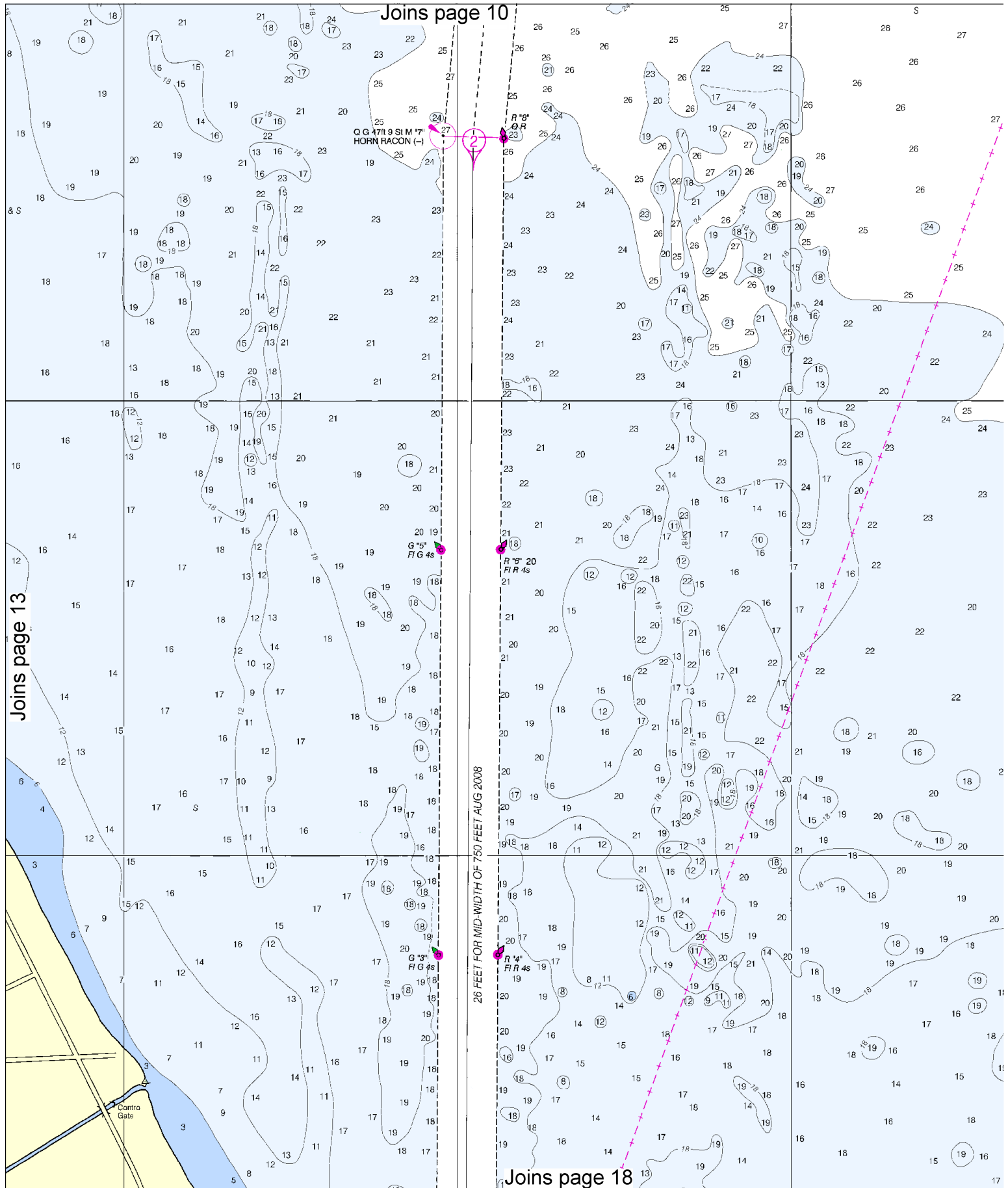


C

H

G





Joins page 10

Joins page 13

26 FEET FOR MID-WIDTH OF 750 FEET AUG 2008

Joins page 18

14

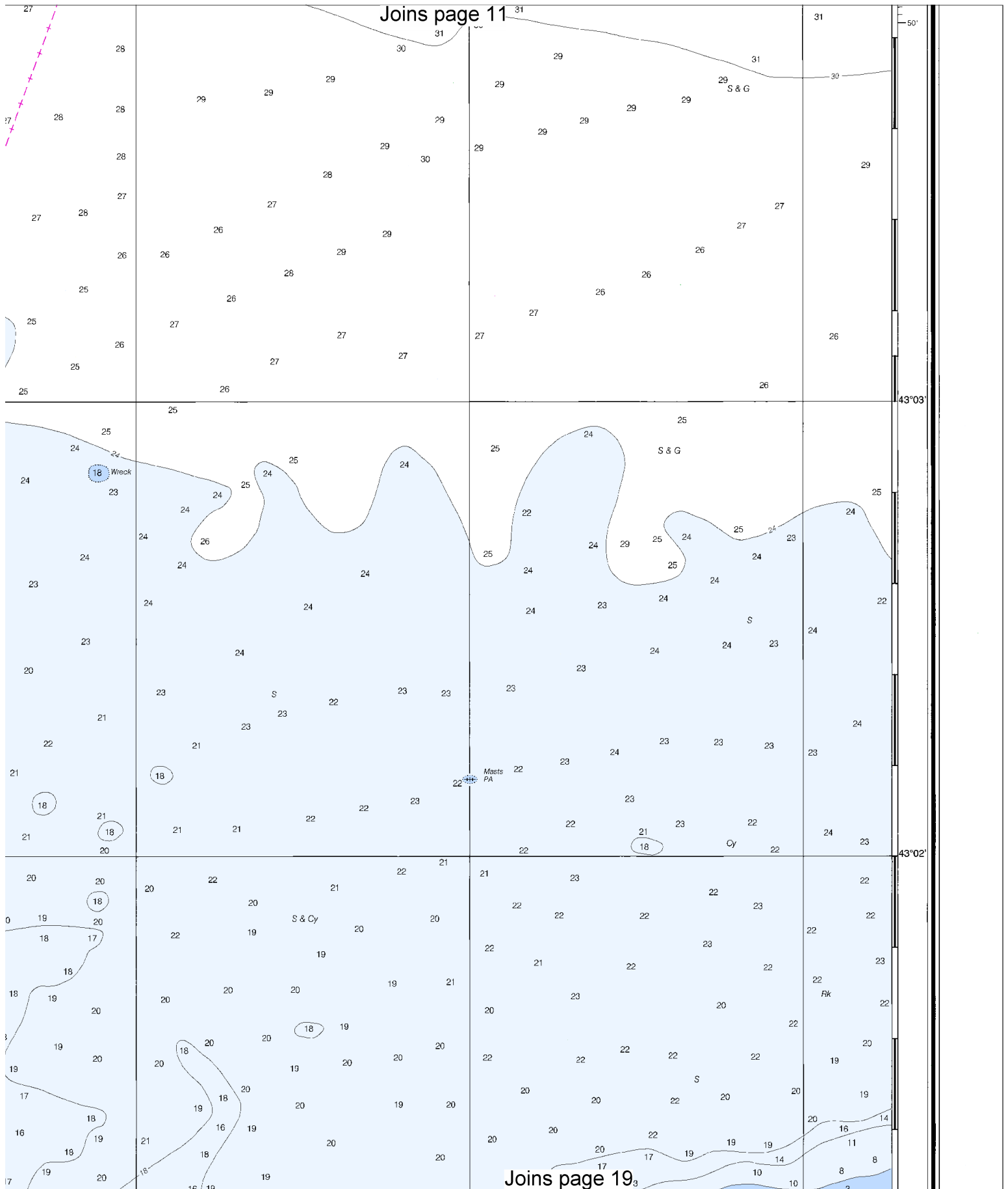


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.





System 1984 Joins page 12 is referred to the North American Datum of 1983 corrected an overage of 0.107" northward and 0.298" eastward to agree with this chart.



UNITED STATES - GREAT LAKES

LAKE HURON - MICHIGAN

SOUTH END OF LAKE HURON

Polyconic Projection
Scale 1:15,000
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum): 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

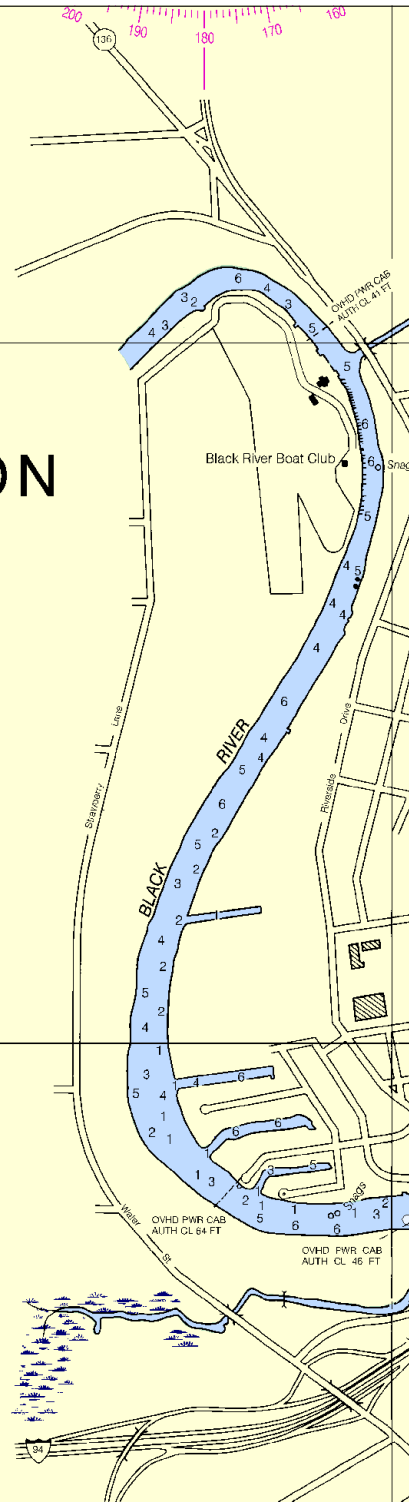
Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio, or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.
Refer to charted regulation sections numbers.



Vessel Traffic Service calling-in point; arrow indicates direction of vessel movement. Mandatory calling-in points are identified numerically. Voluntary calling-in points are identified alphabetically. For additional information see U.S. Coast Pilot 6 and the U.S. and Canadian Notice to Mariners.



16th Ed., June 26/99

14865

CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency, the Canadian Department of Fisheries and Oceans, and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910 - 3282.

SO

16

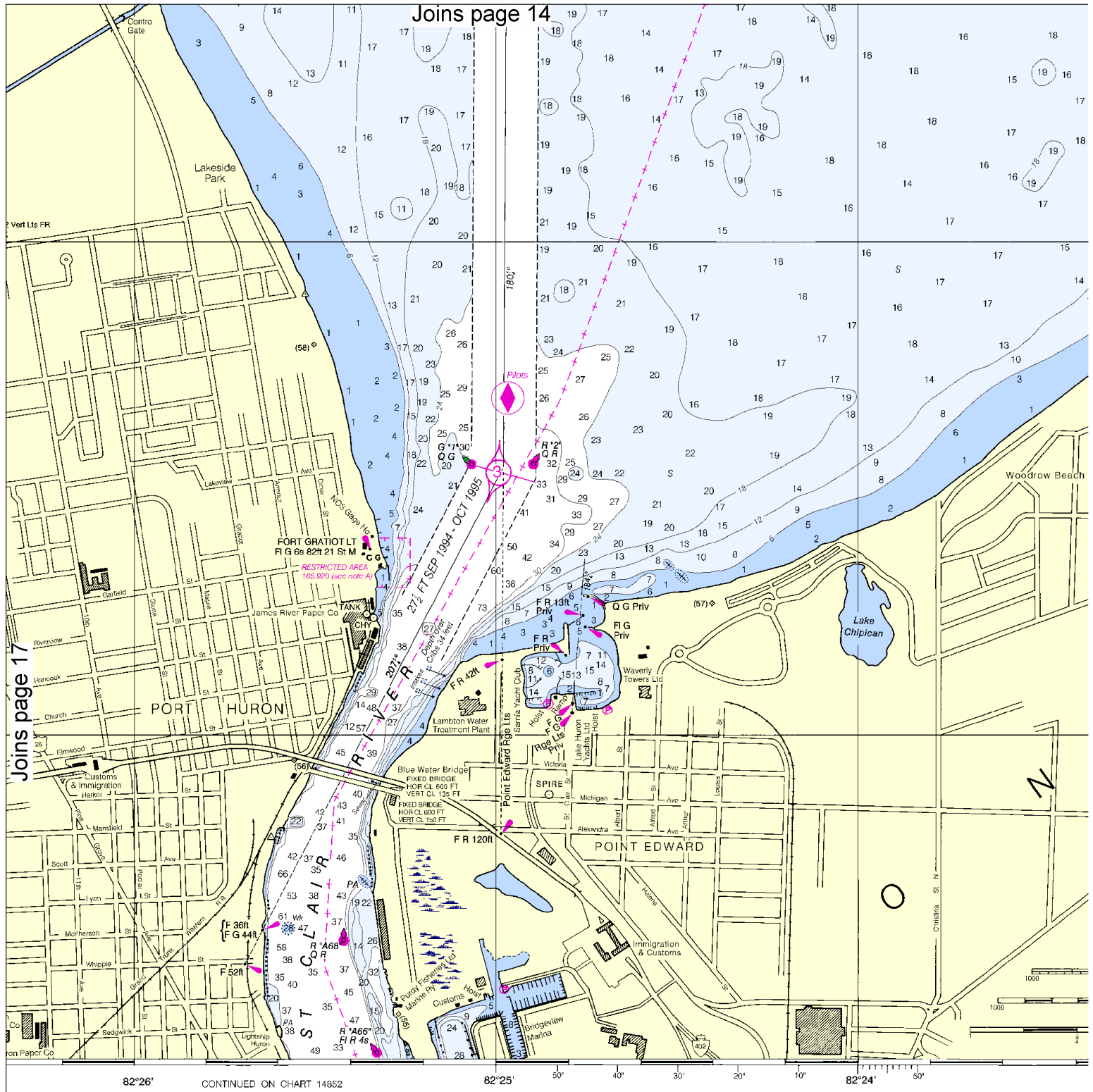


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.

500 0 500 1000 1500
Yards



FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

18

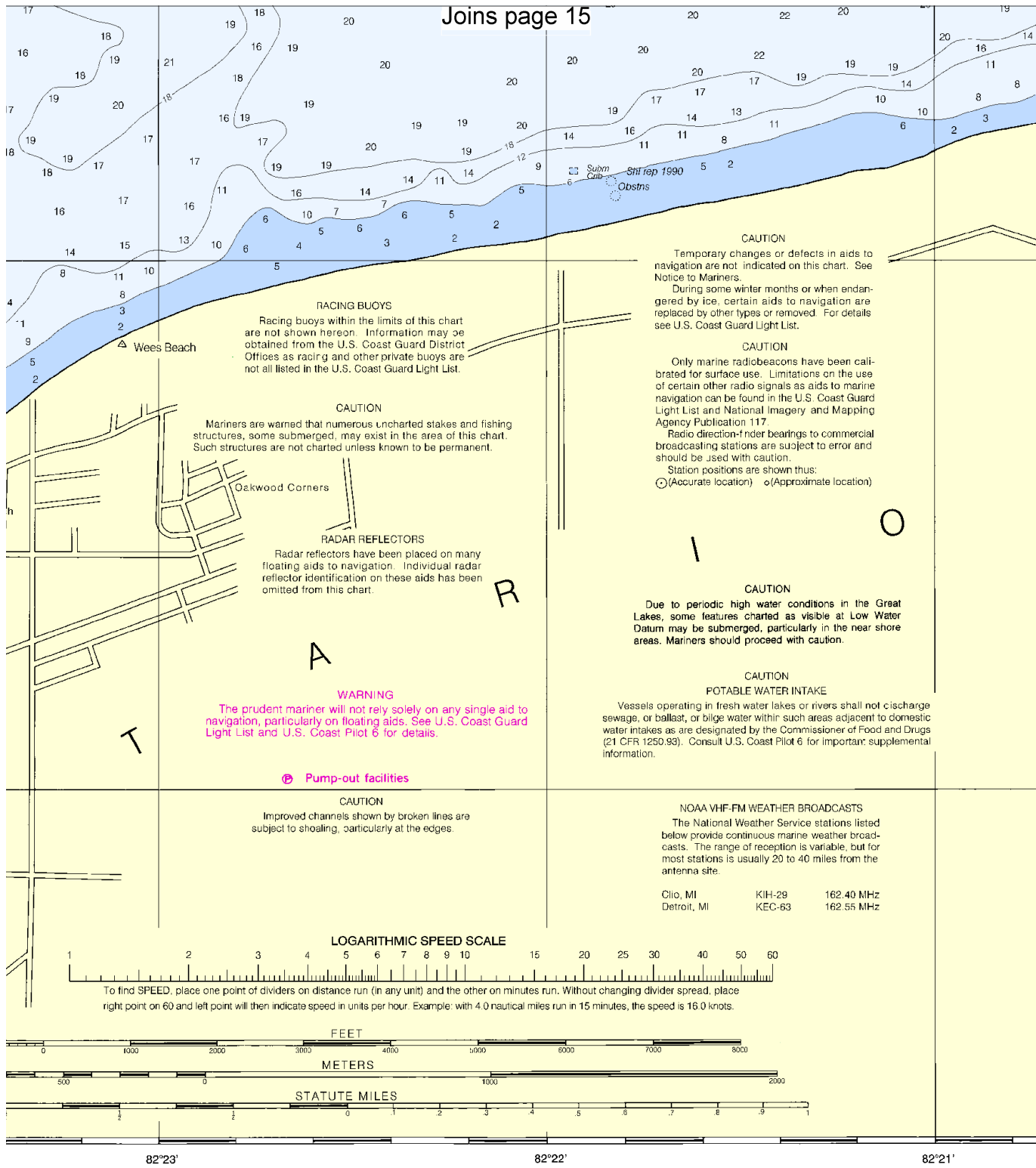


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.





FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

South End of Lake Huron
SOUNDINGS IN FEET - SCALE 1:15,000

14865



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (RCC) – 216-902-6117

Coast Guard Search & Rescue (Detroit) – 313-568-9524 or 313-568-9560

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.